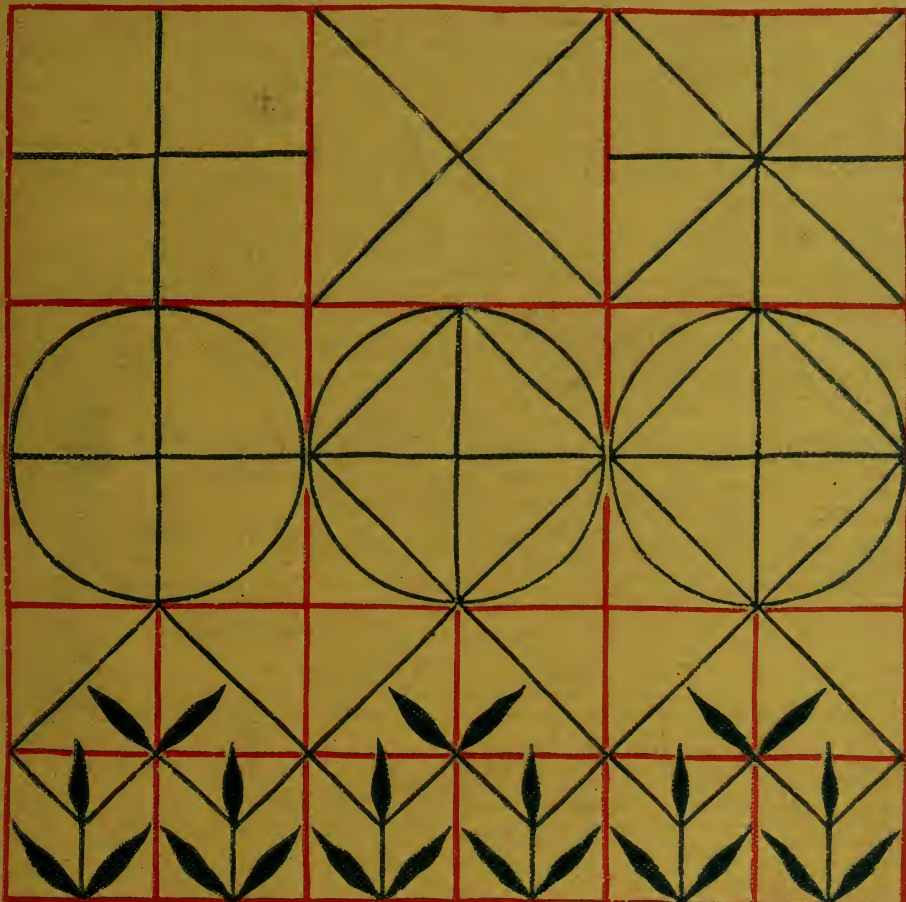


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GRADED DRAWING



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JUNIOR · CLASSES

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GRADED DRAWING

FOR

INFANTS AND JUNIOR CLASSES

BY

ANNE E. ROBERTS

HEADMISTRESS, GRANGE ROAD INFANT BOARD SCHOOL, MIDDLESBROUGH

AUTHOR OF "THE CHILD IN SCHOOL" "TINY PLAYS, ADAPTED FROM AESOP'S FABLES"

"THE KINDERGARTEN READER"

LONDON

BLACKIE & SON, LIMITED, 50 OLD BAILEY, E.C

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P R E F A C E

The writer cannot let this little book leave her hands without a word of sincere gratitude for the very valuable help rendered by the kindness of capable friends. If confidence arising from considerable experience in working the scheme needed any reinforcement, they have supplied it. She does not claim that it is exhaustive. It is an attempt to develop thought and skill by an effort to teach drawing by scientific methods.

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GRADED DRAWING

FOR

INFANTS AND JUNIOR CLASSES

INTRODUCTION

It appears to the writer that the methods adopted for teaching Drawing to Infants and Junior Classes should vary greatly from those used for the older children.

The latter should at once recognize the difficulties of a drawing, and be able to deal with them consciously; a beginner should, on the other hand, be lifted over his difficulties, like a little child beginning to walk. When he is taking his first steps, it would serve no good purpose to call his attention to them. Discouragement, rather than exertion, tires the beginner; his path, therefore, should be made very easy, till skill by practice gives him the consciousness of self-confidence.

A little child, when setting out for a walk, should not be told where he is going, nor should he be taken a long straight road; he will be tired sooner, and less inclined to notice his immediate surroundings than if taken by a route where little of the path can be seen at a time.

Young children are generally imaginative, and therefore find that an element of mystery is fascinating. The literal do not wish to speculate, but to know. Hence, when a child can recognize the nature of a difficulty, its speculative faculty will get exercise on the question of how to overcome it. In the meantime, something to develop the exercise of this faculty is needed, much in the same way as the un-

folding plot of a novel serves to encourage and develop a habit of consecutive thought.

The difficulties of a drawing appear to show all at once. The sight should prick to effort, not give rise to dismay. The power that conquers difficulties comes of attacking and conquering difficulties; and these should be presented so as not to discourage the beginner. He may see them at once, and forthwith proceed to make some attempt to reach his ideal, or, in his ignorance, begin inconsiderately, yet hopefully, but soon lack patience to keep up his interest. Lacking interest, his work inevitably tends to become unintelligent and mechanical.

These points are taken into consideration in this course of Drawing. It was drawn up, in the first instance, for the writer's own school, where it has proved an unqualified success.

Though at first sight it may appear difficult, it is really easier than the ordinary method of copying, for it is adaptable and scientific.

Aim of Exercises.—The exercises are chiefly preparations for the concrete work which should be given along with them, and are mainly synthetic. The copy is not placed before the child and, as it were, taken to pieces; it is built up from dictation, the whole exercise being seen, as a rule, only when the child has completed it. The various stages are most carefully graded, and progress should be easy. The exercises, taken as they come, supply most of the revision needed. The concrete work, for which the exercises are preparatory, may proceed co-ordinately with the synthetic. For example, as soon as the child can draw a good line, he should be encouraged to represent, say, an iron rod placed in different positions.

The exercises given will in no sense be wanting in interest, for the children watch for the growing shape with eagerness. Moreover, they soon learn that the power to draw squares, oblongs, etc., gives them increased power in representation. They see these shapes entering into ordinary objects, and have great pleasure in recognizing them.

It must be remembered that the dictation is not for purposes of

testing, but of teaching. The aim is obedience, which should begin by being blind. The child does not lack interest in his work for lack of knowing what shape is coming. A scientist watching processes in nature without knowing what they are leading up to, is not the less interested. A child seeing a blacksmith shaping a piece of iron, may watch all the more keenly for not having a conception of what it may become. Keen observation, therefore, is essentially of the first importance in drawing.

Drawing lines from dictation to make a shape at first unknown may be taken as analogous to combining sounds to make syllables, and syllables to make words, as in teaching to read by the syllabic method.

In exercises where every line is dictated, the child's mind is set at liberty for voluntary observation. He gets deeply interested in what is growing into shape under his hands. He is in the right mood for observing, and the point that makes most impression on him is that which is most suggestive.

That children learn to reflect is proved by their readiness to reconstruct most of the previous exercises, and oftentimes to reproduce their drawings from memory.

The observant eye is needful, but so is the obedient hand. The child likes to make lines, and so to obey its innate love of movement, but it has to be taught to make straight lines, regular curved lines, etc. Movement should be subject to restraint. The power of the hand should become, like other powers, the result of restraint as well as of action.

Stages in Learning to Draw.—The work of learning to draw is begun by the children mastering the straight line. Having, through that, placed themselves under restraint, they are called upon next to draw the circle. This may be thought too difficult, but it must be remembered that the child has the ideal of a circle in his mind. It reminds him of a shape that has given him the greatest delight—of a ball, a penny, a hoop. It is simple, and little children possibly

execute a circle with less trouble than older people. The idea must be simple, for it is complexity that presents the difficulty to the child. When permeated by a simple idea, its body is wonderfully obedient, and very much at one with its mind. In the case of the circle, it has to secure obedience to its own ideal, not another's.

Having the ideals of a straight line and circle firmly fixed in its mind, the child unconsciously uses them to judge of all other lines. It is in a position to make comparisons that will aid its judgment. It can compare every oval or ellipse with its ideal circle. The oval or ellipse has become the right shape for it to draw. In this Scheme the egg is chosen, as the child is already able to form a mental picture of one. This, with the circle and straight line, enables the child to form a judgment on all lines and curves brought under his notice; and his judgment will be accurate mainly in proportion as it holds vivid and distinct the mental pictures of the straight line, circle, and oval.

Every concrete object the child attempts to represent calls for the action of this law of comparison. Are the lines straight or curved? If curved, are the curves belonging to circles? If not, how much do they resemble a circle, and how near do they approach a straight line? Observation and judgment are developed together by the exercise of its executive power. This needs great attention to details: *e.g.*, if the child is induced to think of the use of the different parts of an article before beginning to draw any part of it, an idea based on the connection between use and shape will possibly be developed, and the work will, in consequence, be probably executed in a more thoughtful manner.

Advantages of this Method.—Some of the advantages of this course have already been indicated. They may be summarized as follows:—

1. The work is not mechanical. The children are so curious to know what is coming that their interest is kept up to the end.
2. They have to listen intently, and obey instantly, or they lose

the continuity of their work. It therefore helps to make them accurate and obedient in carrying out instructions.

3. They are so anxious to see what is coming that their faculties of observation are brought into play.

4. They learn to make lines, and judge them on scientific principles.

5. The lines are drawn in the right order. (In drawing from the concrete it is interesting to note that this matter gives very little trouble, showing how important it is to secure a right habit.)

6. The sight of the exercise does not suggest difficulties, but achievement. Taking line by line from dictation, they have, as a rule, finished the drawing themselves before they see it complete. (One result of this is, that when allowed to draw anything they see in the room, there is scarcely an object of any size visible but some of them will attempt it.)

7. The skill and power of observation gained is valuable in their object-lessons, etc.

8. The love of order, neatness, and beauty of arrangement developed by the course cannot fail to have a good effect on them generally.

9. Being given a very little to do at one step, each step is simple and hence easy.

10. The exercises are thoroughly graded.

11. The method of drawing, and the absence of rubbing out, make it extremely easy to commence work on paper, even before the end of the course.

PRACTICAL HINTS TO THE CLASS TEACHER

Slates.—These should be unlined, and, to secure freedom of movement, should measure 9×7 . For the convenience of the teacher in examining slates, the children should be made to keep the hole in the frame at the top. Should they have an exercise requiring the greatest length across, the hole may be placed on their left. On no account should they be allowed to turn their slates during their drawing, or

move them to make it easier to draw a difficult line. Inability to work properly on a fixed surface would naturally result. The children should be made to keep their slates well in front of them, and to sit straight and squarely to their work. They should be encouraged to hold up their slates now and then in a vertical position, and to take a good look at their work. It relieves the eyes, and, by giving reality to their work, gives juster ideas as to how they have accomplished it.

The slates should be well cleaned at the beginning of the lesson. Rubbing out should be forbidden to older children, and discouraged with younger ones.

Pencils.—These should be of full length, not so hard as to scratch the slates, and should be kept sharp enough to draw a line thin and clean.

Other Accessories.—The children may be encouraged to keep bits of string in their pockets. These, stretched from point to point, will prove if a line be true.

When they have once learned to draw a line, practice in position of lines may be given by hanging a long chalked iron rod in various positions against the black-board.

The children may lay laths and sticks to form perpendiculars, angles, etc., and then draw them.

A hoop is useful to hang in front of the class as a ready illustration of a circle.

If the teacher use an ordinary flat ruler, marked with inches, to test the length and straightness of lines drawn by the children, they will gradually learn its use.

The hoop and a cane that will bend will be found useful in teaching curves.

Position.—This is of the very highest importance. No good work need be expected unless full attention is paid to position.

The children should be seated comfortably, their feet firmly planted on the floor. The light should fall from the left, so as to allow them to sit squarely at the desk. The pencil should be held easily, and not

too near the point. The work should be done by the thumb and the first two fingers, the joints of which should not be held rigid.

In drawing a level line, the child should be taught to begin at the left end; the elbow should be kept near to the side, while the wrist is held so level that a small coin would lie on it while the hand moves along (but not resting on the slate).

In upright lines the elbow should be kept away from the side, while the wrist is bent, the lower edge being nearest the slate.

After sufficient practice in level and upright lines, the children will adapt themselves to slanting lines, and later to curves, with tolerable ease.

SECTION I

Lines.—Much of the art of drawing lies in sound methods of producing lines. Very little difficulty will be experienced in the following exercises by those who have succeeded in getting the children to draw lines of good quality on sound principles.

The teacher should show the children that she gets a line by passing her hand steadily, slowly, and lightly along. The pencil is passed along so very lightly that the line, instead of being continuous, is broken into tiny portions. On looking closely at those tiny portions it will be seen that in each case the mark is most distinct where the pencil first touched the surface. This shows a suggestion of dragging in the movement. Steady practice will secure a steady, continuous, yet light, line; but the teacher should not hurry the children, or the correct balance between freedom and restraint will not be attained.

Sometimes the children become so absorbed in a figure that they forget to attend to the quality of the lines. It is then well to let them revert to a very simple form. They can then concentrate their attention on the lines themselves.

They should be able to draw a good line before they are allowed to draw the exercises. It is more interesting to a child to draw mere

lines than it would be for an adult, as what is a mere mechanical effort for the adult requires from a child the exercise of his highest powers.

As the children grow accustomed to the terms used, the exercises, instead of proceeding line by line, may begin with the instruction to draw a square, or an oblong, etc., and then follow with details of what is to be done next.

Notes on the Exercises.—In some cases part of the figure may be indicated on the black-board, the rest being left for the children to complete.

Perhaps the most difficult part of the course—indeed it may be looked on as a kind of *pons asinorum*—is the effort to make perpendiculars with slanting lines. To meet this difficulty the teacher might sketch a cabin on board ship, first level, as on land, and then in the positions it would assume when the vessel was in motion. The children find it very difficult to recognize a right angle, unless it is composed of level and vertical lines. To form the required figure with laths or stick-laying is a most useful preliminary exercise. When once a child can recognize a right angle in any position, the remaining exercises will present little or no difficulty.

SECTION II

Drawing from the Concrete.—As the children pass in the exercise of the day, they may be set to draw some object of simple construction. If not very familiar to them, it will be all the better: they will be the more likely to draw from observation, rather than from memory. They are very much given to draw what they know to be there, regardless of whether they can see it or not. They should be required to draw the object just as they see it.

The following points should be insisted on:—

- (a) The direction of the lines.
- (b) The proportion of length, breadth, and spaces.
- (c) To work from top to bottom, and from left to right.

The different lines and regular forms should be pointed out in objects in the room, such as oblong doors, black-boards, etc. This will greatly aid the children to draw from the concrete.

There should be very little measuring of lines to get correct proportions. Drawing from the concrete will help to develop the sense of proportion. Though its influence may be indirect, and though progress be slow, it will be sure.

A good plan is to get the children to suggest an object or shape in the room that is something like the exercise they have just finished, and let them draw it: *e.g.*, after drawing a square or oblong, they might draw the outer lines of a picture frame on the wall; after a circle, a fan, or the clock face. After an oval or ellipse, an egg, egg-cup, or horse's shoe might be drawn. The choice will be largely governed by the environment, a country school providing a different selection from one in town.

It is well to call the children's attention to the lines in objects, even when they are too difficult for them to reproduce. The more ambitious will make attempts, and all will grow more observant. (A pattern used for ornament may be suggested as example.)

A judicious question is often the best method of correcting drawing from the concrete.

DRAWING ON PAPER

Children who may be relied on for careful work may be promoted to draw on paper, even in the Infant School.

They should be required to draw lines distinct, but not heavy, and no "lining in" should be allowed. It is rightly condemned by the best authorities as inartistic and bad in principle. Some of the arguments against it may be mentioned:

- (a) It leaves a bad drawing bad, and may even spoil a good one.
- (b) The position of the hand while lining in is almost necessarily stiff, constrained, and unnatural.
- (c) Before lining in, the lines may be free, graceful, and accurate,

but lining in will render the result hard and mechanical. This is so when the operation is well done, but when it is badly done, whatever good points the drawing might have had previously, it is left with practically none.

(*d*) Though the lines in the drawing may have been produced in right order and in proper directions, it does not follow that the lining in will follow the original plan of work. It will probably follow no law but that of apparent convenience.

(*e*) It encourages a heavy, dragging, digging movement of the hand that should not be acquired, but avoided.

(*f*) The fact that lining in is intended encourages rubbing out, another objectionable habit.

When rubbing out is allowed, the work is attacked without sufficient observation and thought. The mind fails to take a high ideal, and the hands are consequently careless. When no rubbing out is allowed, the mind is impelled to take a better grip of the work before entering on it. The standard is raised, and better work is turned out at the first intention. The work gains in simplicity, vigour, and neatness. The mind is even more a gainer, as it is trained to directness, sureness, and a habit of facing the fact that there are things which, once done wrongly, cannot be put right.

SECTION III

Some hints on "Design".—At intervals during the course a series of lessons should be given to promote design. They will serve to develop the artistic taste, to stimulate the imagination, and to teach the eye rhythm of form.

As soon as the children can draw lines, they may learn something in the way of arrangement. They should combine the lines and curves as soon as they can draw them, and so satisfy at once their creative instinct, and develop a love of ordered beauty.

The course of exercises on design were begun by the children in

the writer's school as soon as they were able to draw level, upright, and slanting lines. The first lesson was entirely taken up in making properly two rows of squares. The next lesson was spent in drawing the squares, and in copying No. 2 from the black-board. No. 3 also took up a lesson. The next time the squares were asked for, but no copy for a pattern was given. The children were told to make their own patterns. There was very little variety that day. At the next lesson the patterns begun by certain boys spread round the class in a wonderful manner. The children seemed delighted with their work, but they had not all realized what was expected from them. It was explained that to make one row different from the row before it would be an improvement. The next lesson showed a great advance. Nearly all had tried, and most of the attempts showed some initiative and evident pleasure in the performance.

It is worthy of note that the designs were in many cases comparatively simple at first, and grew in complexity as time allowed. Some of the patterns seemed to suggest that the young artist had conceived a design he had been unable to carry out correctly.

In the early exercises the children are expected to draw the squares themselves, and then copy with pencil or brush. After copying two or three exercises they should be allowed to originate a design of their own. In fact these exercises are intended chiefly as suggestions rather than exercises to be followed rigidly.

A good design is not meaningless. It suggests some thought or idea. In order to express this thought or idea, it is necessary that certain principles of design should be observed, and it is well that teachers should know something of these principles. They will otherwise be unable to criticise justly the work of their pupils.

The idea of repetition must enter into the design. The effect of repetition in some sense resembles that of rhythm in music or poetry, and may be brought about by repetition in lines and spaces, and by colour in different shades, or by the same form in different sizes, etc.

The element of contrast must be present. A design should not consist of horizontal lines only, or of vertical lines only. Contrast may be a matter of size, shape, or colour, but it must always exist.

There should be enough variety to prevent the design from being monotonous and uninteresting. If colour be used, the use of different shades of one colour convey at the same time the thought of repetition and variety. The same shaped leaf in different sizes serves the same purpose.

Then the use of horizontal lines conveys the idea of rest and stability, while vertical lines suggest growth. Curves give grace, and convey the idea of rest or growth in proportion as they partake of the character of these lines.

A design, to be satisfying, must have a just balance and proportion of parts, and to be quite complete, should contain level, vertical, and oblique lines and curves. If colour enters into the scheme, the three primary colours should be represented directly, or in due proportion in a blended form.

A design should be logical, *e.g.*, if it contain the idea of growth, that growth should not give the impression that it springs from nothing; and the lower part of the design should give the effect of strength. The idea of weight, and a support to that weight, should be combined. Flowers and leaves may be combined, or fruit and leaves, but not generally all these together.

To carry the idea of fitness still further (though this will not apply to the designs of little children), in the case of decorative designs to be utilized, they should be appropriate to the material, shape, and purpose of the body they are intended to decorate.

It would be absurd to expect that the original designs of little children should satisfy all these requirements, but the work done under the supervision of the teacher who understands even a little of the principles of design, will be very different from that done under a teacher who works by rule of thumb.

Much good work may be done by setting the children to arrange

shells, leaves, etc., to form pretty designs. They may afterwards be encouraged to draw what they have arranged.

GENERAL REMARKS

A series of well graduated exercises on the piano should prepare the minds of pupils for some of the principles of music, so in these exercises the children should gain some knowledge of the fundamental principles of form, with (as in music) a certain power of imitation and execution.

They should be taught to notice lines in their object lessons, especially those that indicate function—the pointed root of a carrot pushing down into the soil, the leaf of a tree spread out to the sunshine. They should learn to distinguish between things that grow, and those that are made. They will learn to look for beauty in natural forms, and also for adaptation to use in things made; if perfectly adapted to use they will have a certain kind of beauty.

Some natures recognize beauty through truth, while others see truth through beauty. Truth can only be there in part if there be no element of beauty, and beauty without some element of truth is equally impossible.

SECTION I

FIRST STEPS AND FREEHAND DRAWING FROM
DICTATION OR BLACK-BOARD

The exercises as far as No. 16 are intended (1) For practice in drawing the straight line; (2) To give opportunities to learn terms and expressions they will need to understand in order to follow directions intelligently: *e.g.* top right-hand corner; middle of top of your slate; middle of the line, &c.

The teacher should show on the black-board how the line should be drawn, with the different position of hand and arm according to whether the line is upright, level, or slanting.

In the diagrams here given the space of each oblong is supposed to represent the slate. The red outline is accordingly not to be drawn. The teacher should always begin in the earlier stages by making the children point out the top, bottom, right and left sides of the black-board and their slates. She should then say exactly what she wishes to have done. A child may come out and indicate by a pointer where on the black board she must begin, the direction her line must take, and where it must stop. At first she may draw the lines, but gradually she will be able to dispense with drawing, and later she will find that indicating points and direction on the black-board will be unnecessary. The children will be able to follow clear verbal directions.

Supposing the change to take place at No. 16, the teacher's work for No. 15 might proceed as on p. 25.

Note.—As soon as the children are able to draw a line clean and straight, they must be taught to look towards the point to which they are drawing, not at their pencil. It is a good plan to first indicate with the pencil the direction of the proposed line before drawing it.

In all the exercises the object is not the drawing of triangles, etc., but the development of reason and skill on the part of the children.

TERMS

The terms chosen are intended to give a picturesque meaning to young children. No apology is needed for the use of the word "level". The word "upright" was chosen as being easily illustrated. A boy stands before his class and the children draw a line to represent his position. When it comes to drawing an upright line downwards the children make it as a matter of course.

LEVEL OR LYING-DOWN LINE.—"Horizontal" used sometimes later when well known.

UPRIGHT.—Described as an up-and-down line.

SLANTING LINE.—Slanting down to left or right.

ANGLE.—Sharp, wide, right—space between two straight lines meeting.

SQUARE.—Four lines of equal length—four right angles.

TRIANGLE.—Shape with three sides and three angles.

PARALLEL.—Like tram or railway lines.

CURVE.—Line bent, but without corners in it.

CIRCLE.—Shape like a ring or hoop.

OVAL.—Shape of an egg.

PERPENDICULAR.—One line standing on another, like a wall on a floor. (To illustrate "perpendiculars" as slanting lines the teacher might sketch the cabin of a ship.)

Note.—Introduce terms only as they are needed.

SKETCH OF LESSON ON EXERCISE 15

Which is the top left-hand corner of black-board?

Which is the top left-hand corner of your slate?

Which is the top right-hand corner of black-board?

Which is the top right-hand corner of your slate?

Which is the left side of black-board?

Which is the left side of your slate?

Which is the right side of black-board?

Which is the right side of your slate?

Find the middle of the left side on black-board.

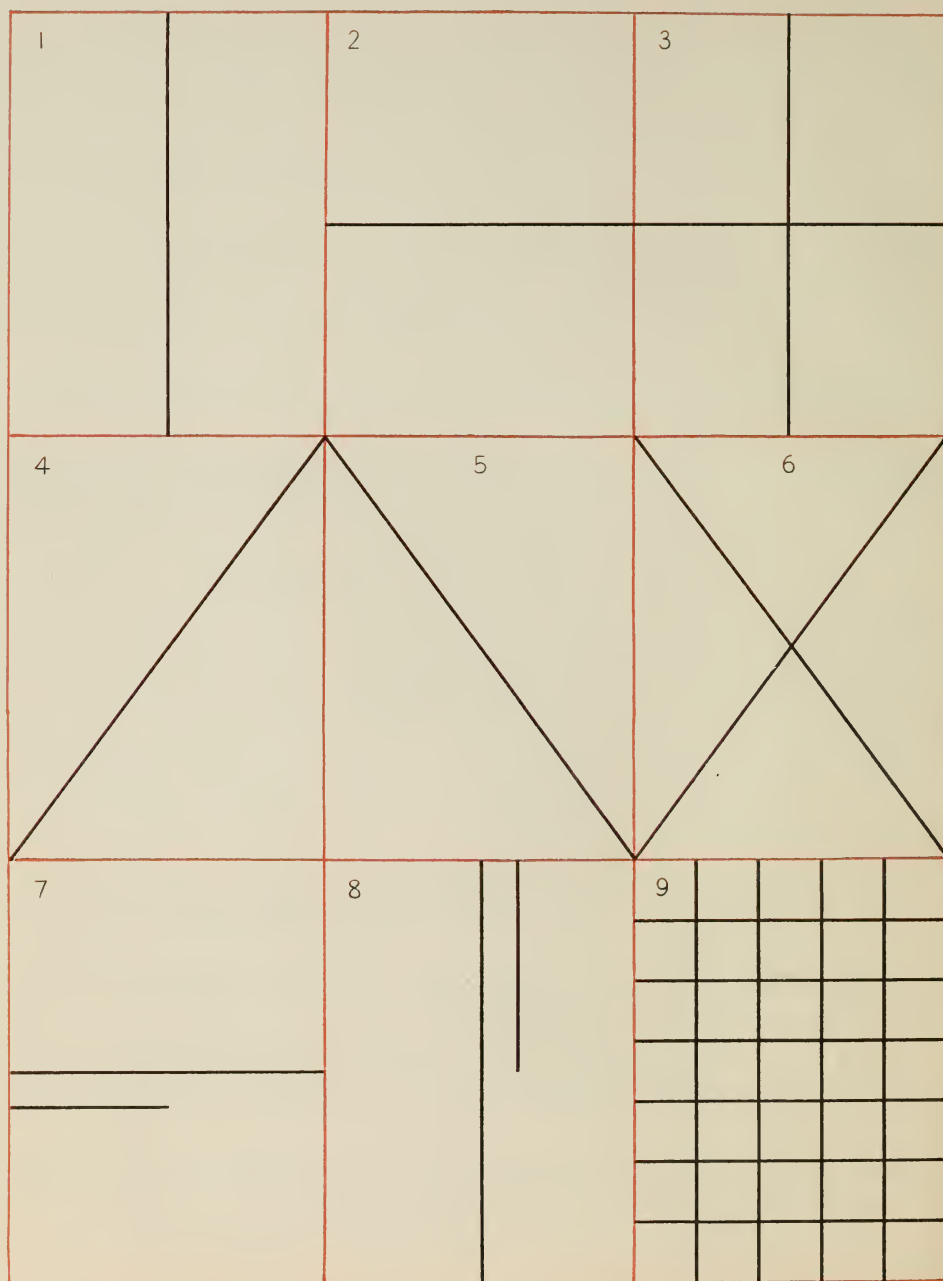
Put a dot there. Is it in the middle?—too low or too high?

We want a level line going right across the middle of slate. Where must it begin? Where must it end? Put dot.

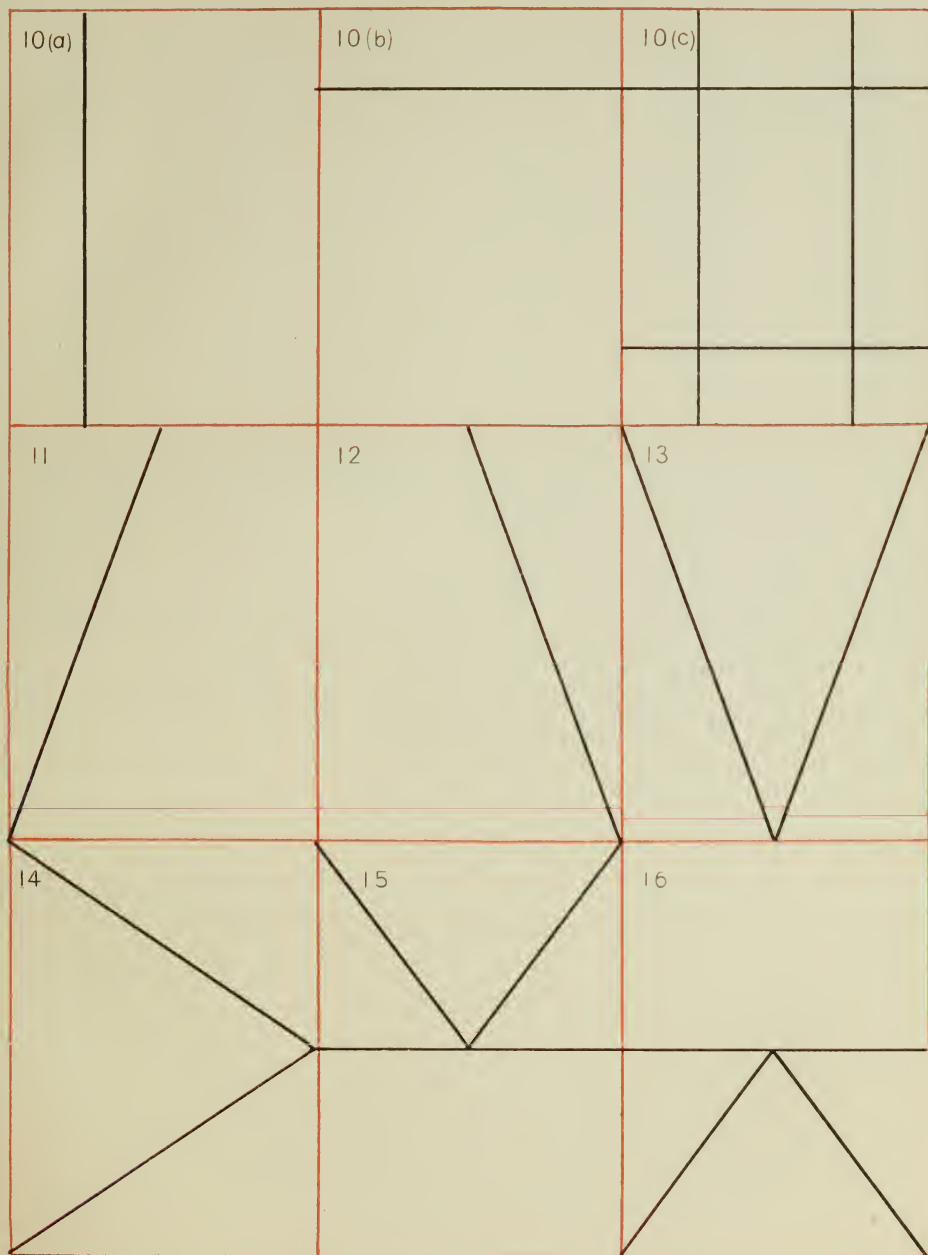
Let two children stretch cord from dot to dot. Is it level? Which dot is wrong? Put it right and draw level line from dot to dot.

Now we want a line from top left-hand corner to middle of level line. Let child show with pointer. Let one child show where line must begin. Let another point to what he thinks is the middle of the level line. (Put dot in right place and draw from corner to dot.)

After drawing the two lines described on their slates, let the children draw from the top right-hand corner to the dot without seeing it done.



Note.—Each of the nine spaces represents a slate.



17. The object in these lines is to begin and leave off in the right place.

In *c* and *f* the lines must also be drawn in the right order, and be of the same length.

18. The same, only carried a step further.

19 and 20. These exercises are introduced to revise the slanting line, and to introduce a complete form of three lines.

The slanting line need not appear on the black-board. The children may be told which points to join.

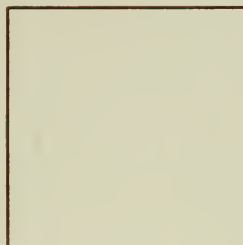
17(a)



17(b)



17(c)



17(d)



17(e)



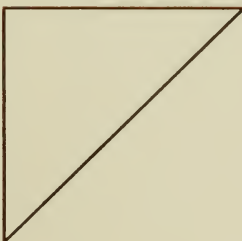
17(f)



18



19



20



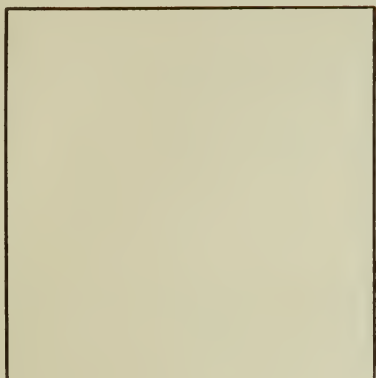
21*a* should be given from dictation. *e.g.* Draw a level line near the top of the slate, not touching the frame. Draw an upright line beginning at the left-hand end of the level line. Draw it downward till it is as long as the level line. Draw another line like it from the right-hand end.

This will be enough for one lesson. For the next lesson revise the three lines and tell the children to join the upright lines at the bottom by another level line.

They should recognize that they have made a square.

22 and 23. These may be omitted, but if included, the teacher may describe the lines as long or short, as it is too early to trouble them with questions of proportion.

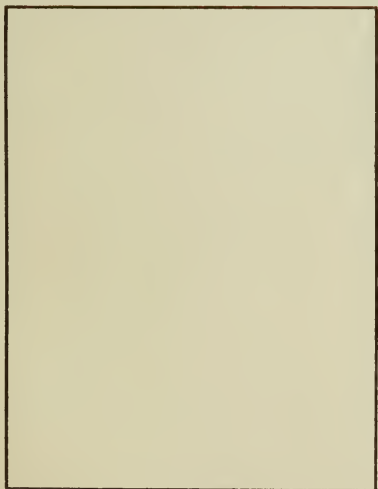
21(a)



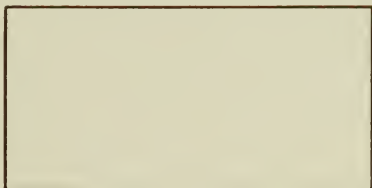
21(b)



22



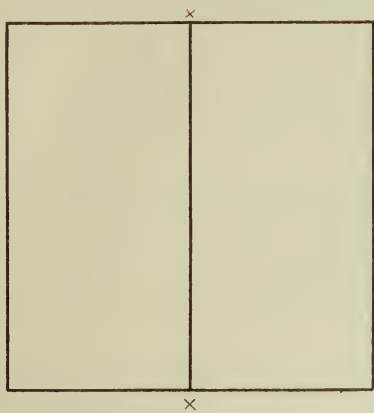
23



Note.—Each of the four spaces represents a slate.

24. After drawing the square from dictation the children should be told to make a cross exactly over the middle of the top line, the teacher going round the class to correct. They should then be told to make a cross exactly under the middle of the bottom line. When they have succeeded in dividing both lines accurately they should be told to join the middles of the two lines with an upright line.
25. The same plan should be followed in this exercise, taking the side lines instead of top and bottom.
26. After drawing the square as before, tell the children to join the top right-hand corner and the bottom left-hand corner.
27. In this draw square as before, but tell children to join the top left-hand corner to the bottom right-hand corner.

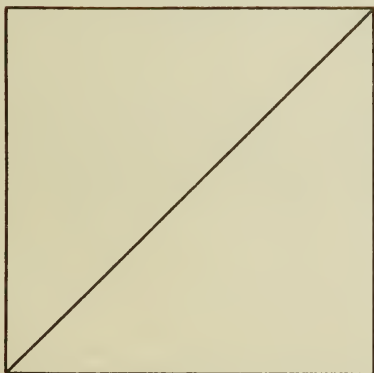
24



25



26



27



28. The series of instructions for this exercise may be as follows:—

Draw a square.

Draw a little cross to show the middle of every side. Join the middle of the top to the middle of the left side. Join the top right-hand corner to the bottom left-hand corner. Join the middle of the right side line to the middle of the bottom line.

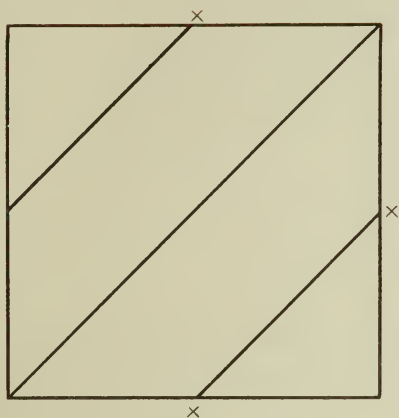
29. In this exercise the children may be told to draw the two level lines of a square, and to make a cross in the middle of the bottom line. When that is done satisfactorily say: Join the left end of the top line to the middle of the bottom line. Join the right end of the top line to the middle of the bottom line.

Note.—Tell the children that the work on the left side had better be done first as a rule, as otherwise there is danger of the work being rubbed out by the arm or sleeve.

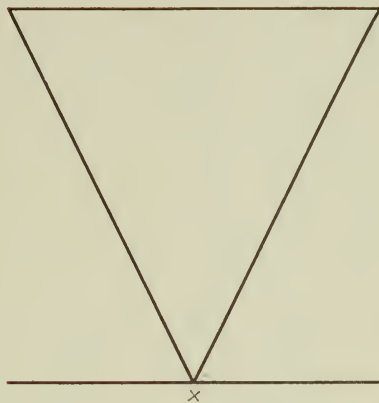
30. The same as 29, only reversed.

31. The children should be told to draw a square, then to show the middle of each line, next to join the middle of top and bottom line by an upright line, then the middle of side lines by a level line.

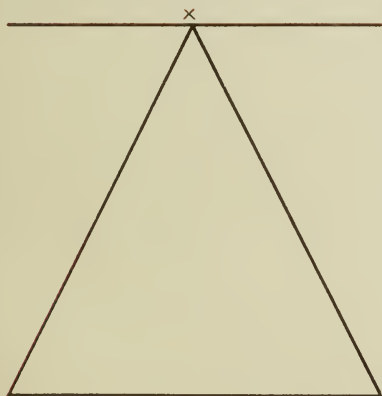
28



29



30

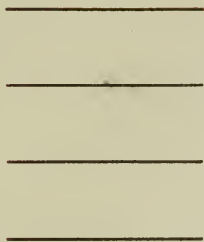


31



- 32*a*, *b*, and *c*. The teacher should give the idea of parallel lines by means of stick-laying, the teacher indicating what she wants by dotted lines on the black-board, the children laying sticks parallel to each other to represent upright or level lines, or combinations of both. Afterwards let them draw the sticks as they lie.
33. The same method may be adopted with this exercise. The children should be careful to lay it true, with both arms the same length, before they are allowed to draw it.

32 (b)



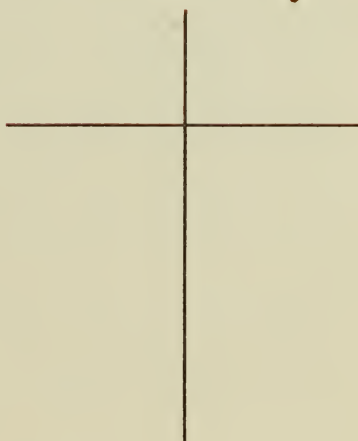
32 (a)



32 (c)



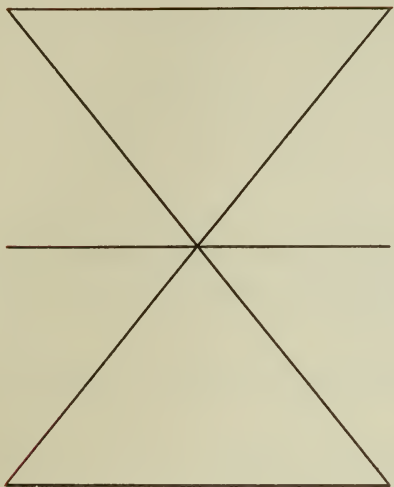
33



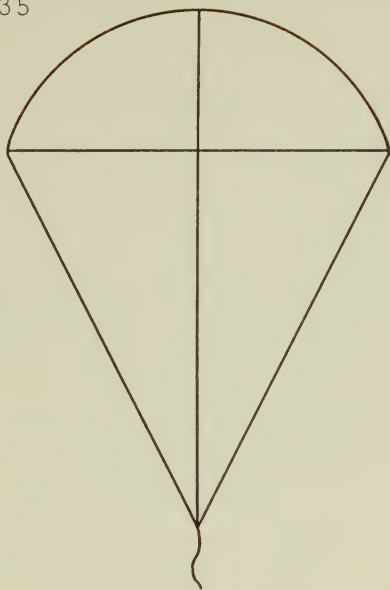
34 may be given from dictation.

1. Draw a level line near the top of the slate.
 2. Draw another level line exactly under the first level line below the middle of the slate (indicate on black-board).
 3. Join the left-hand end of the top line to the right-hand end of the bottom line.
 4. Join the right-hand end of the top line to the left-hand end of the bottom line.
 5. Draw another level line across so that it goes through the place where the lines cross. Make it just as long as the other level lines.
35. Revise 33. Tell the children to join the left end of the level line to the bottom of the upright line, then the right-hand end to the bottom of the upright line. Tell the children to make a bent line over the top from end to end of the level line, and touching the top of the upright line (bend a cane to illustrate). The children will be delighted to find they have made a kite.
36. The children should be given two laths, which they should lay across each other at right angles, forming upright and level lines crossing exactly in the middle. After drawing the figure on their slates (the hoop may be hung before the class), the children should see their teacher fill in one quarter of the curve on the black-board. They should then be allowed to finish their circle so that it touches the end of each line.
37. The same as 36, only tell the children to join the points by lines instead of curves. Show the difference by bending the cane and holding it straight.

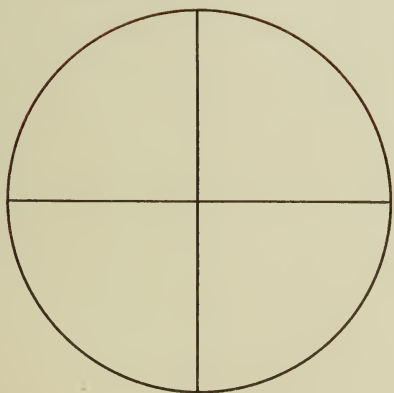
34



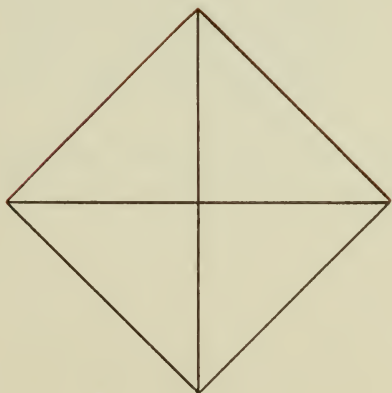
35



36



37

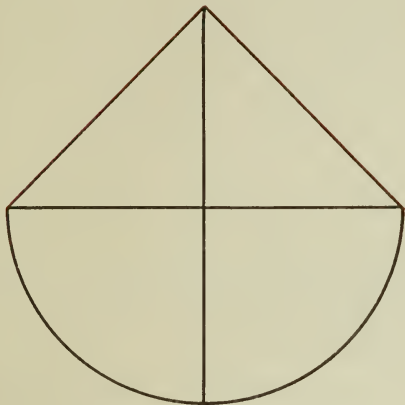


- 38 can be given from dictation in the order of crossed lines, slanting lines, curve. (This exercise usually pleases children. They liken it to a ship.)
39. This also may be given from dictation in the order of crossed lines, circle, slanting lines.

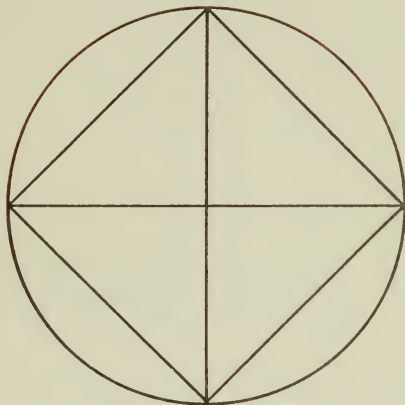
Note.—Details should be given carefully, *e.g.*, the last line: Draw a line from the right-hand end of the level line to the bottom of the upright line.

40. The teacher here may draw a level line on the black-board with a dot beneath it exactly under the middle. When the children have copied exactly they may be told to join the ends of the line to the dot. They may afterwards be told to draw a skipping rope over the top from one end of the level line to the other.
41. The same as 40, but reversed.

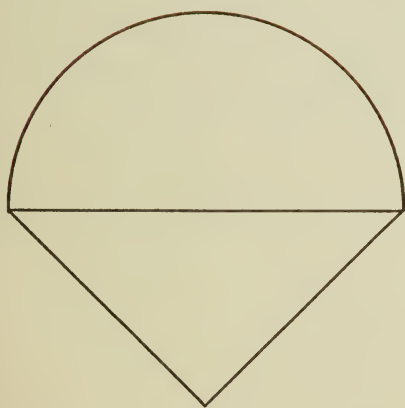
38



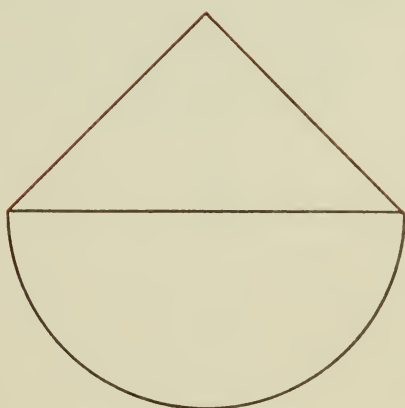
39



40

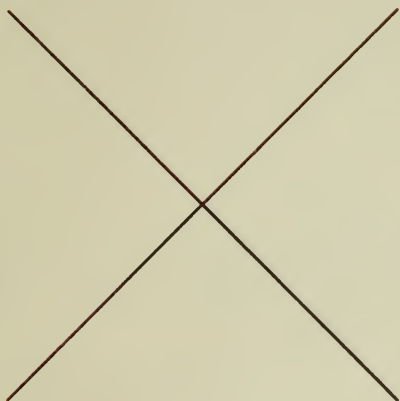


41

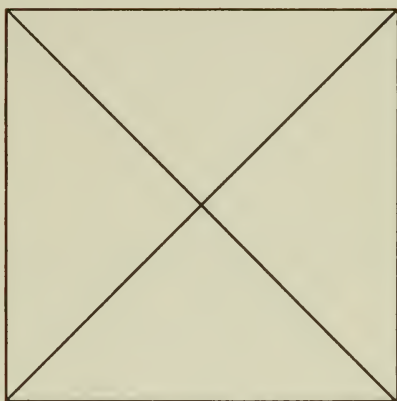


- 42*a*. Much use must be made of sticks and laths to illustrate the perpendicular in slanting lines before the children should be set to draw it. (This is a very important exercise.)
- 42*b*. Revise 42*a* and join the points to form a square. Then let them make the figure by drawing a square and putting in diagonals.
- 43 and 44. These have the same crossed lines as bases. In 43 the children are told to draw a circle round, touching the end of every line. (Insist on no corners in the curve.)
- 44 may be drawn twice, once with the slanting lines as bases, next with the upright and level lines first. The children should be made to see that the lines standing out from the middle are of the same length. (This is a very popular exercise.)

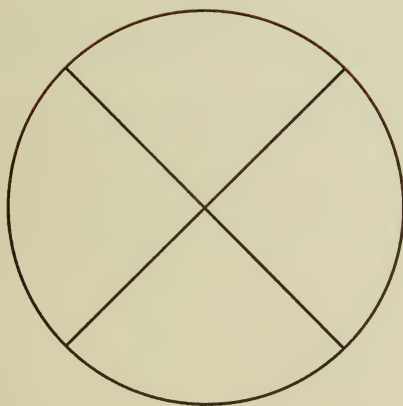
42 (a)



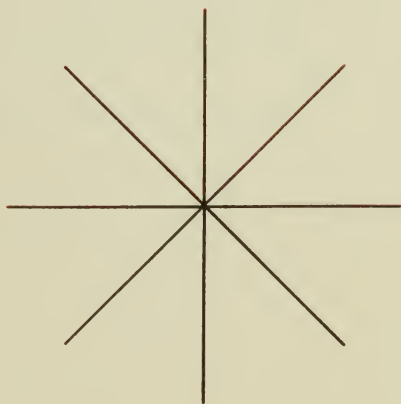
42 (b)



43

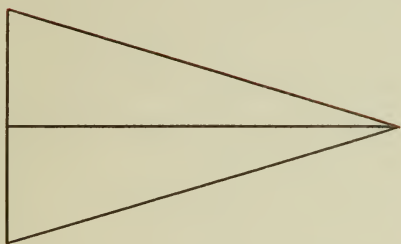


44



- 45 and 46. The teacher may draw the level and upright lines on the black-board. After the children have copied them let them put in the slanting lines from direction.
47. Let the children repeat 46, telling them to make the level line much longer. Let the teacher indicate on the black-board how she wants the curve drawn. Let them make a dot on the level line where they think it should touch.
48. Directions:
- Draw an upright line down left side of slate.
 - Put a dot exactly in the middle of the line.
 - Draw a level line to the right as long as half of the upright line.
 - Make a half circle touching the ends of all the lines.

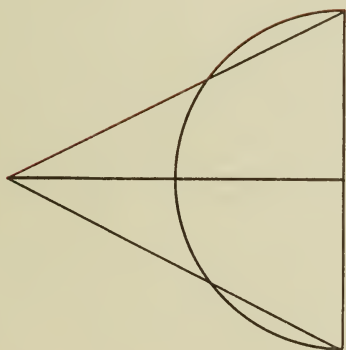
45



46



47



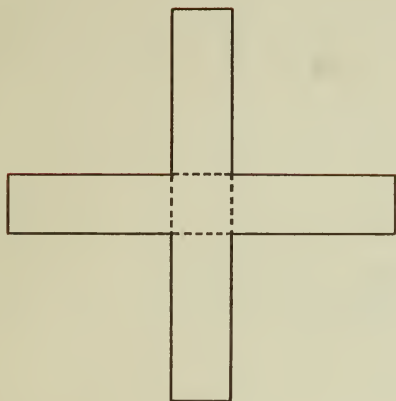
48



49. Let the teacher think of two streets or roads well known to the children, which cross each other. Let her represent them by two sets of parallel lines crossing each other. Show them she must rub out the part dotted in the drawing to let people walk round corners. After the children have copied it correctly give them 49 to copy.

50 is 42*a* revised. After revising let the children copy 51 and 52.

49



50



51



52

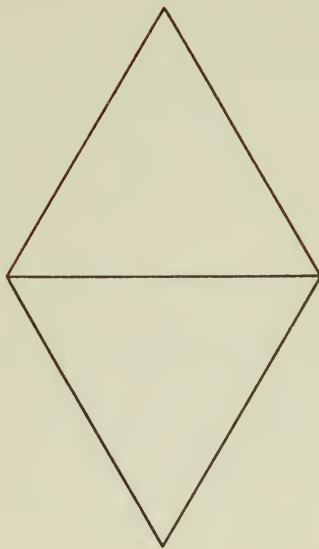


- 53 is 52 with centre rubbed out and curves added. It may be omitted with the younger children, as may 54 and 55 if thought best.
54. Before attempting this, the children should watch the teacher draw a triangle on the black-board. They should see that to get the position of a dot for the apex she uses the length of the level line for a measure, and measures from the middle of it. When they have drawn one triangle let them draw another from its base.
55. After drawing a triangle the children may copy 55 and 56. The children should draw them as two and three triangles.

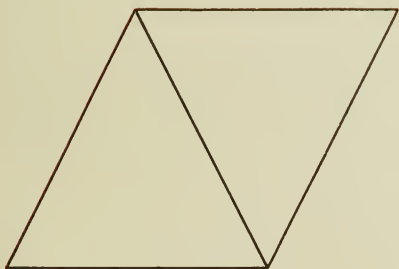
53



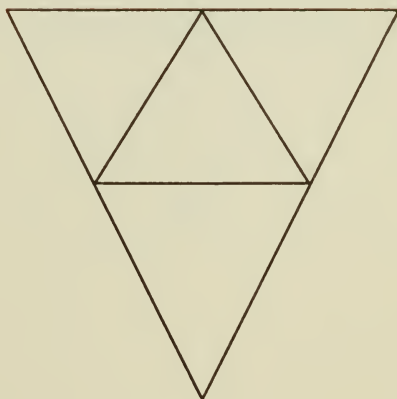
54



55



56



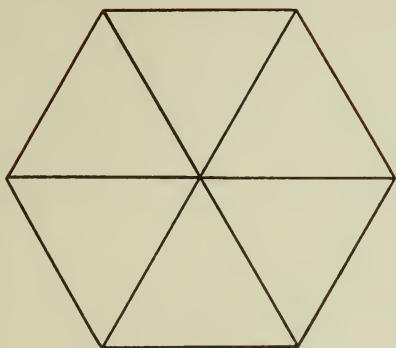
57. Let the children make the slanting lines from a copy. Tell them to put in the level line across the middle, and to make all the limbs the same length. Tell them to join the ends of the limbs by straight lines.

The object in 57 is to educate the children's eyes to judge amount of slant.

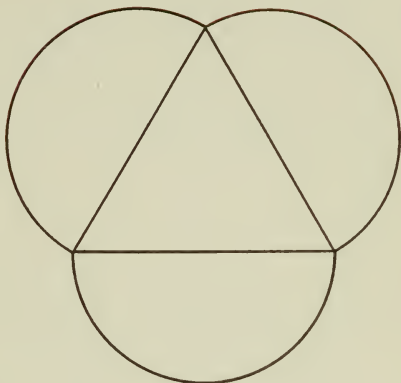
58. Draw a triangle with equal sides. Draw a curve on each side (a half circle if there is room).

59*a* and *b* should be drawn from the black-board, the angles first and the curves put in after.

57



58



59 (a)

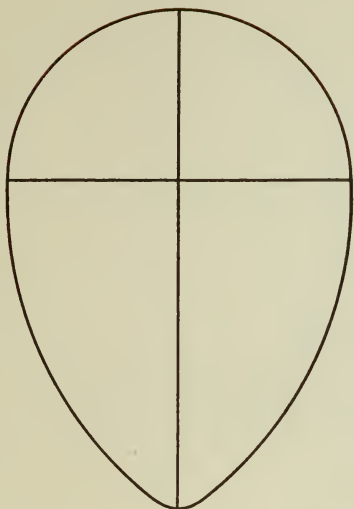


59 (b)

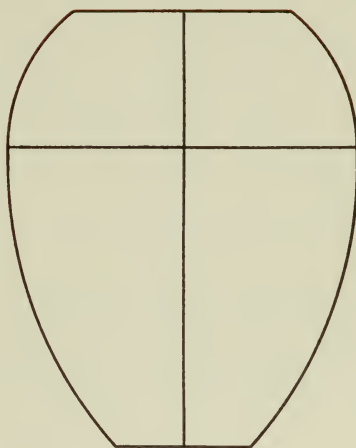


60. Before drawing this exercise it will be well to revise the kite, the egg following easily from it. Tell the children when they are revising the kite that they will have an egg to draw next, and that they must look at one at home or in a shop window.
61. In drawing the vase the top and bottom level lines should be added to the crossed lines. The children should draw the left curve from the copy on black-board, and put in the right curve to balance.
- 62 and 63. The plan in these may be the same, the left curve drawn from the copy, the right put in by the children without a copy.

60



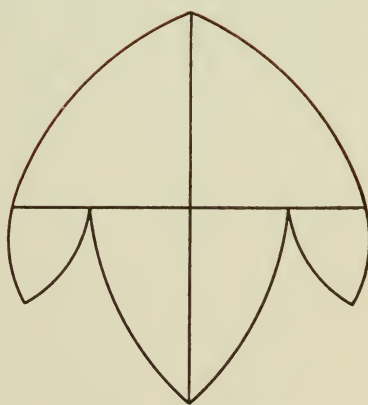
61



62

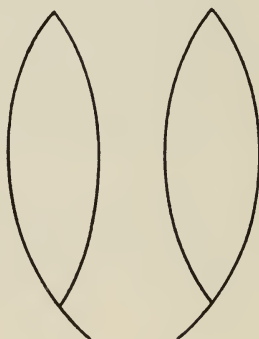


63

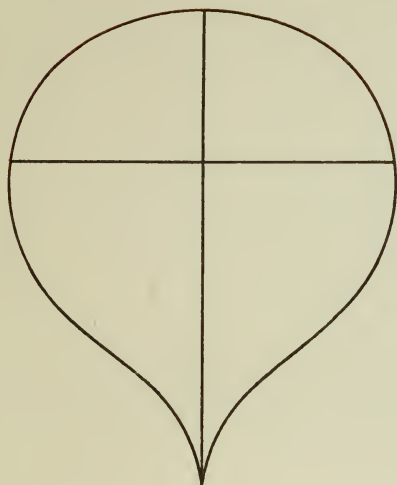


64, 65, and 66 may be taken as last exercise.

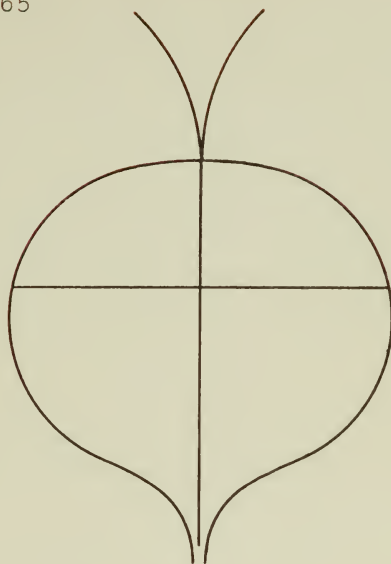
67. Before beginning 67 the teacher may draw four strokes on the black-board, beginning at the top as below.



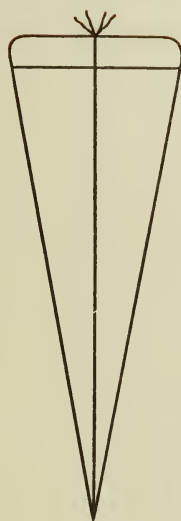
64



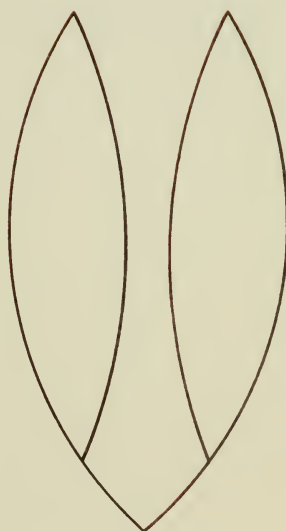
65



66

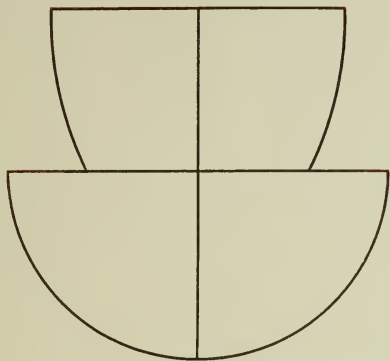


67



68. Let the teacher draw on the black-board all the straight lines and the curves on the left, the children being told to make the right side themselves.
69. This may be drawn from the copy.
- 70 and 71. The teacher should draw the straight line first, putting in the curves after. After drawing from the copy the children might be allowed to draw the exercises from memory.

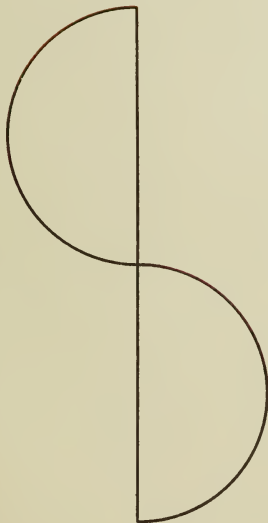
68



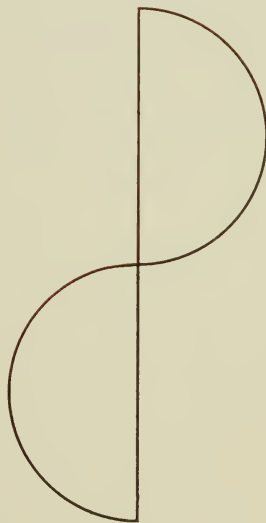
69



70

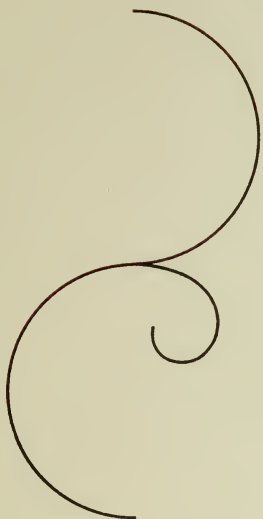


71

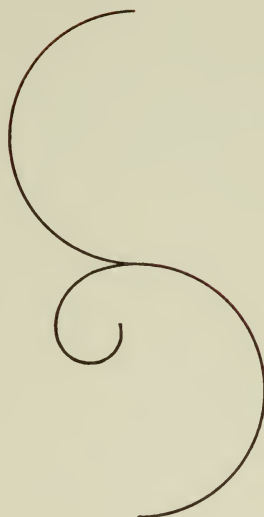


72 and 73. The main line of the curve should be drawn by the children from the black-board, the branching curve being put in after.

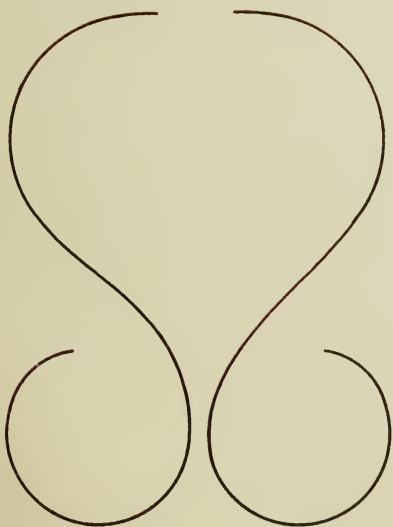
72



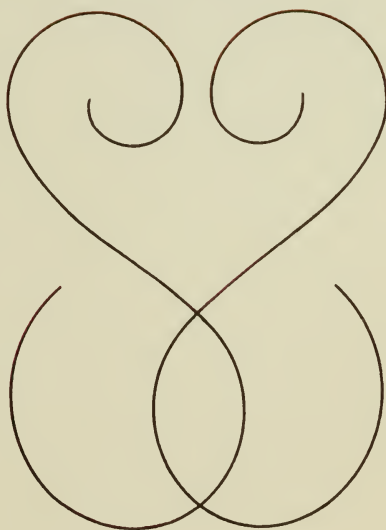
73



74



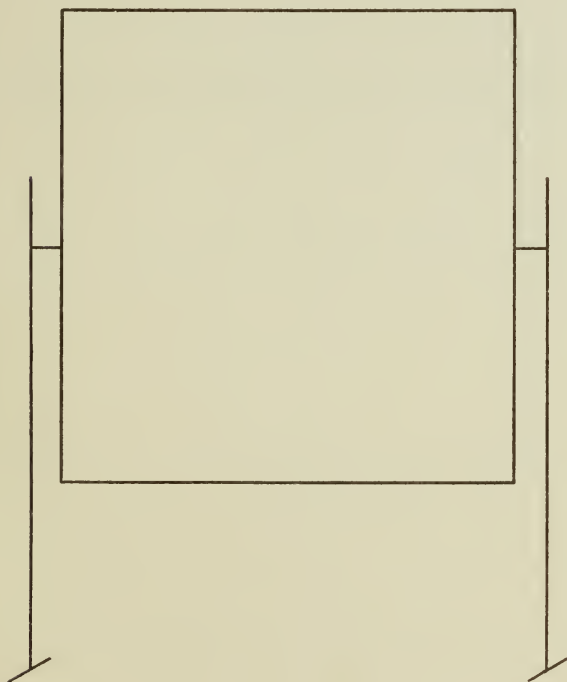
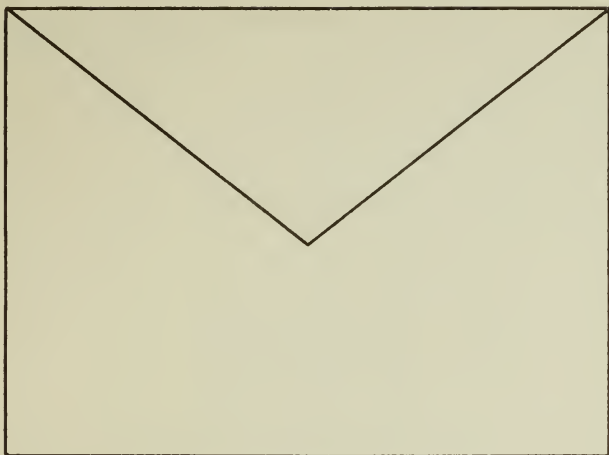
75

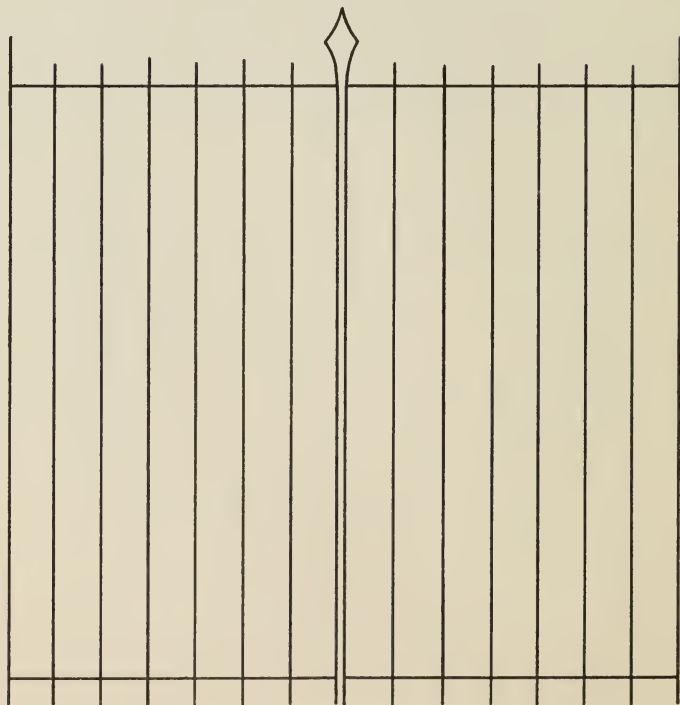
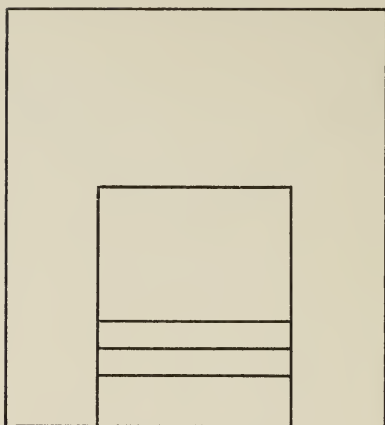


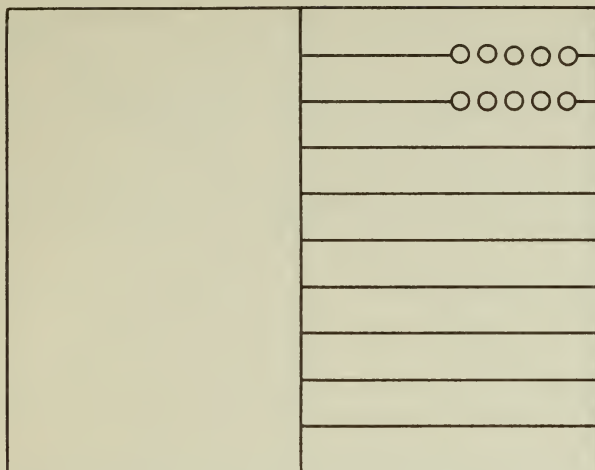
SECTION II

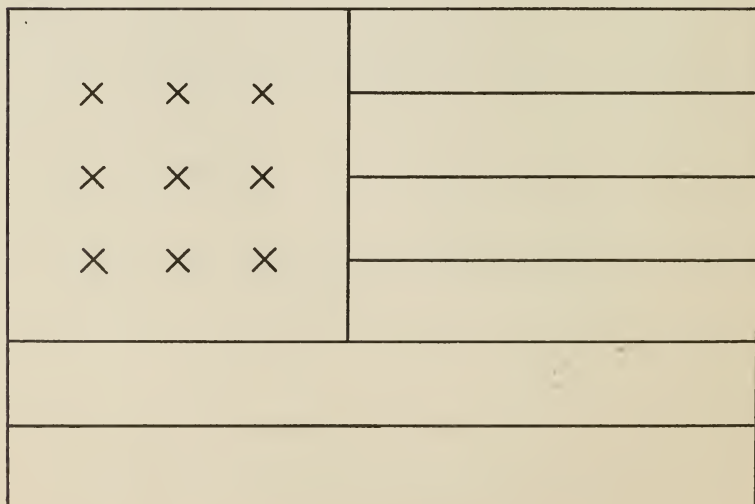
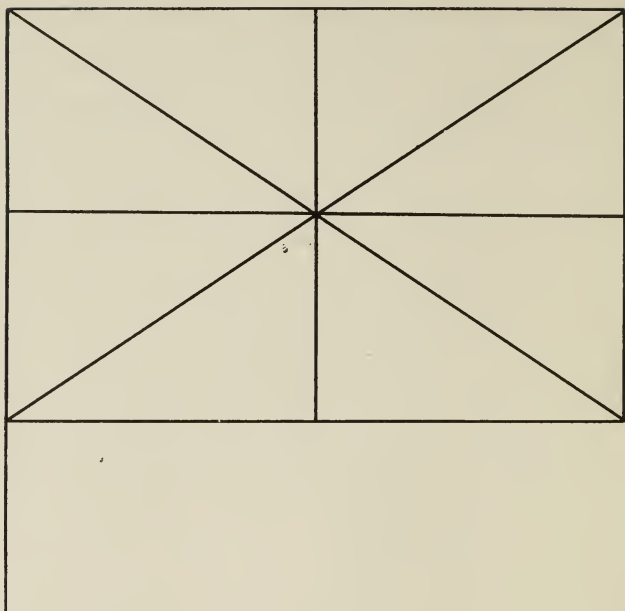
DRAWING FROM THE ACTUAL OBJECT OR
FROM THE BLACK-BOARD

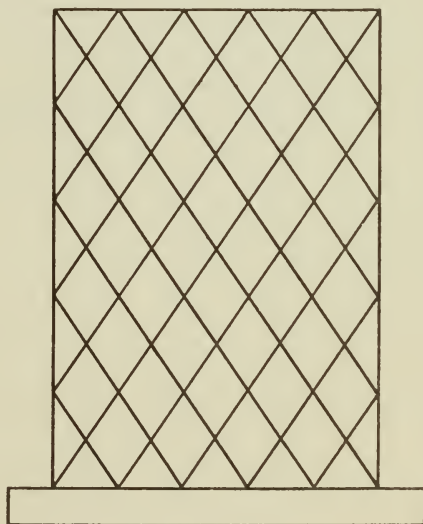
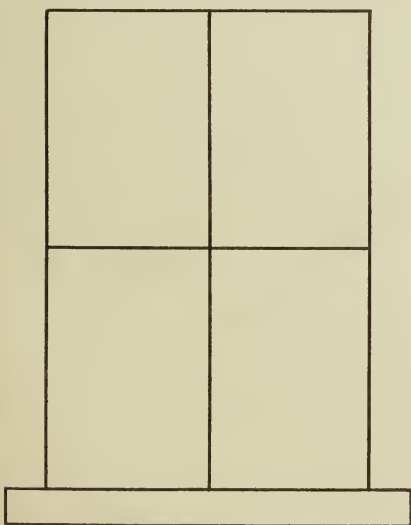
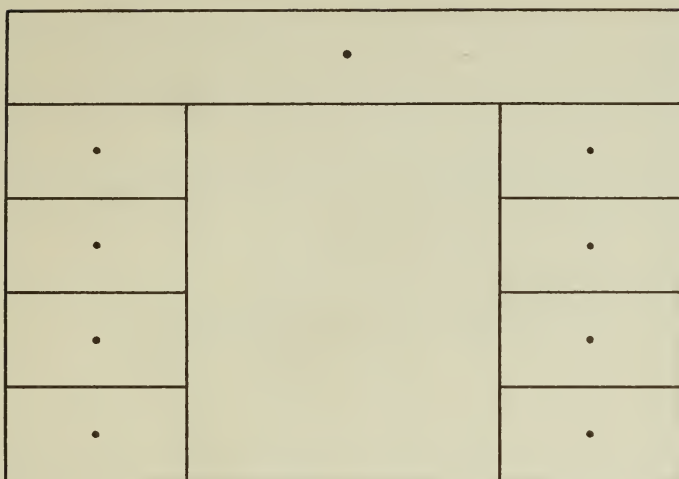
The work in this section may be given from the black-board only, if the teacher so chooses. The best plan, however, whenever possible, is for the children to draw from the actual object, the teacher giving hints by means of the black-board; or the children who do the ordinary dictation (drawing) exercise right the first time may have the privilege of drawing an object from the actual or from the black-board.

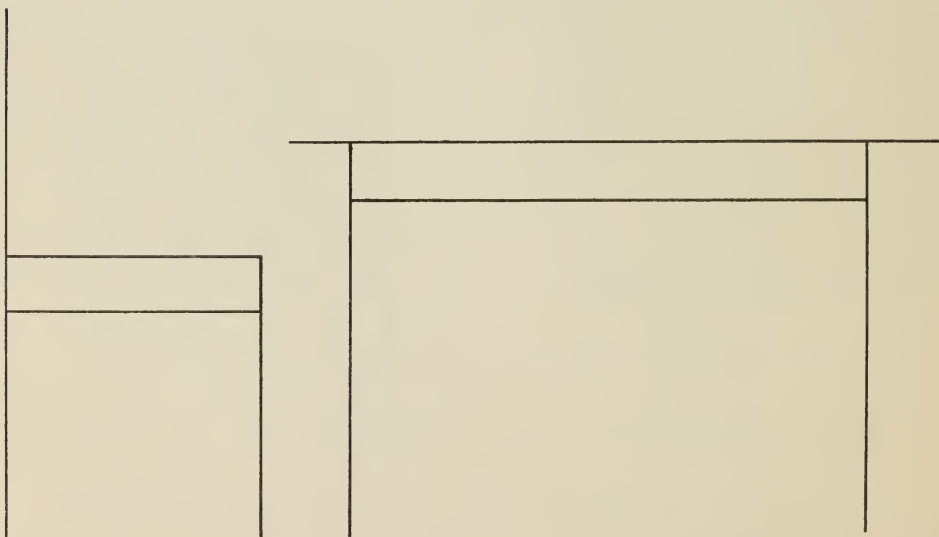
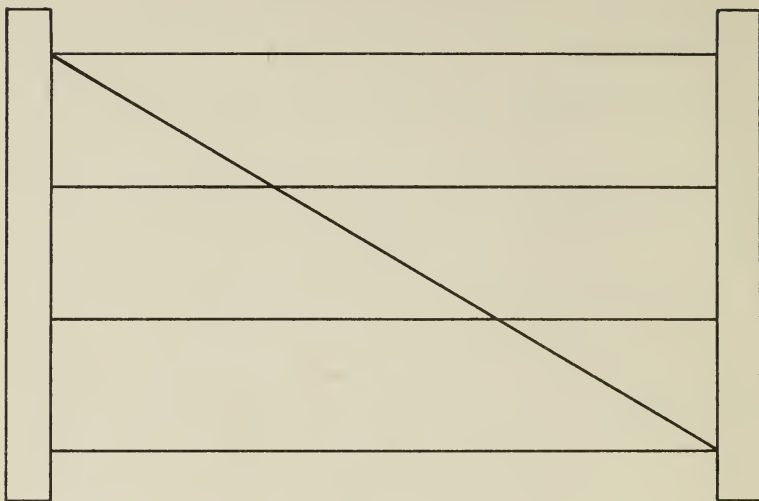


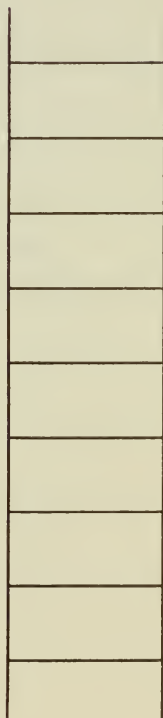
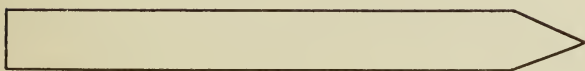
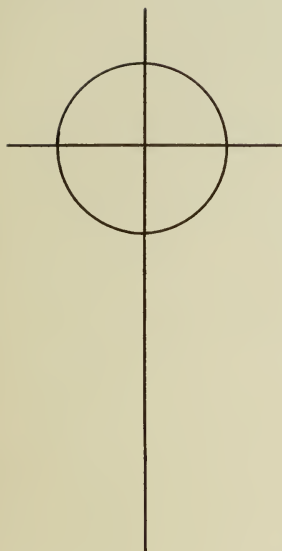
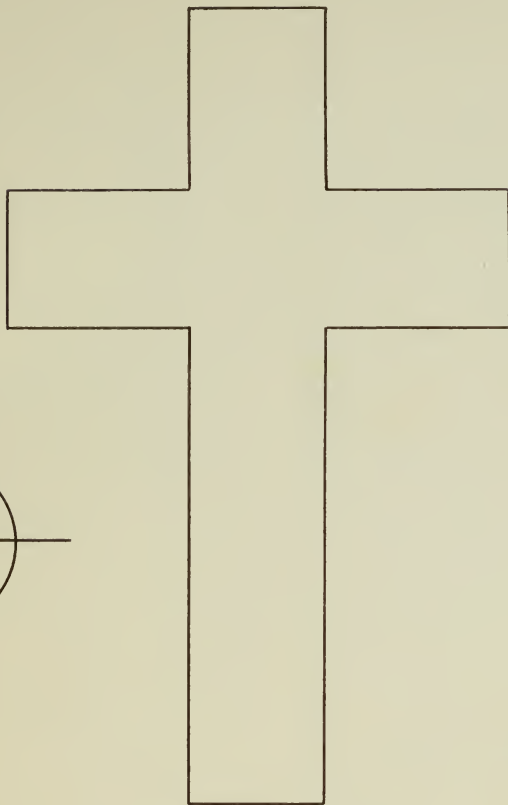


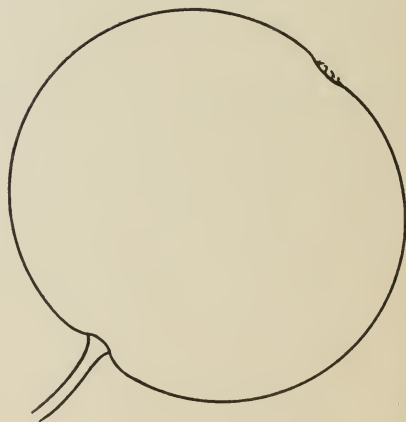
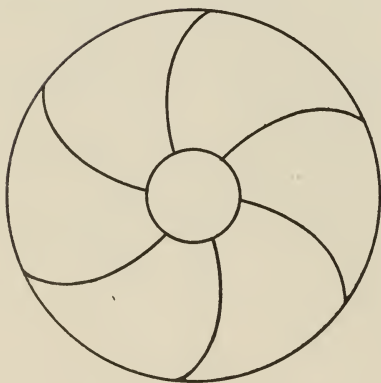
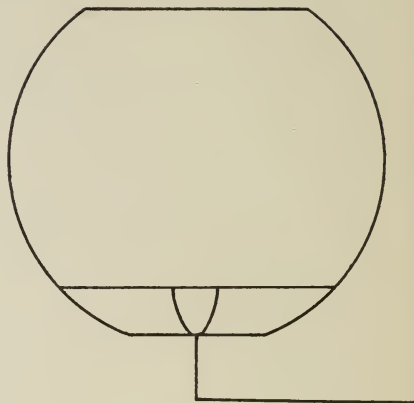


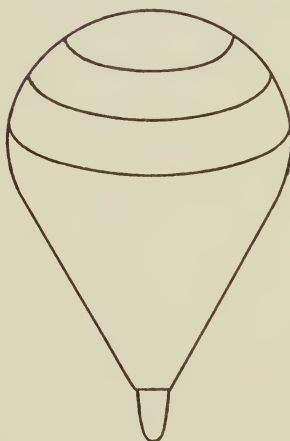
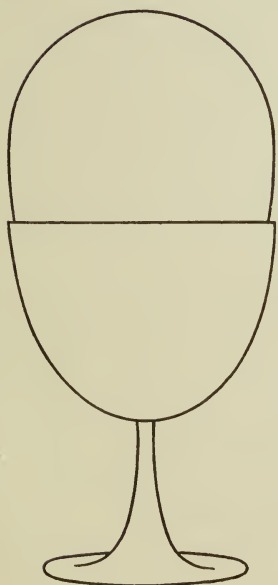
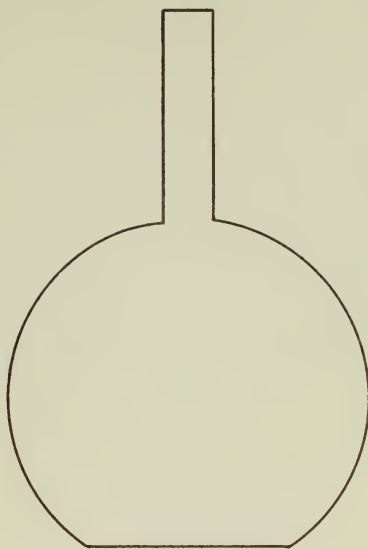
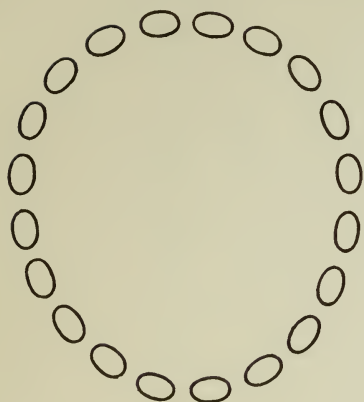


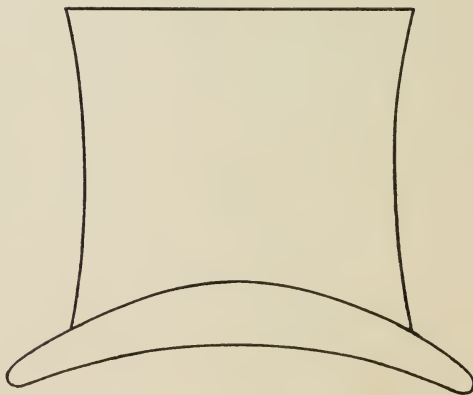
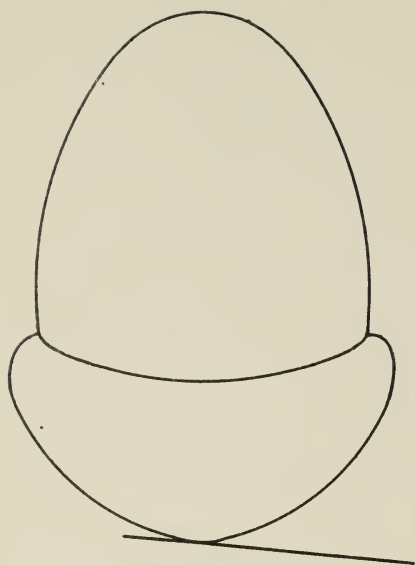


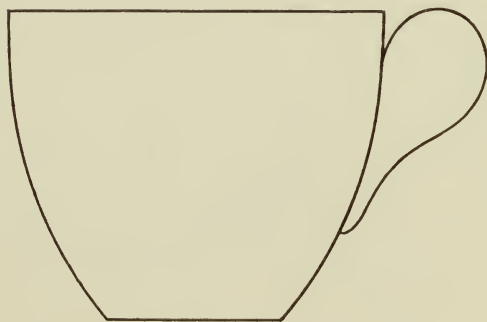
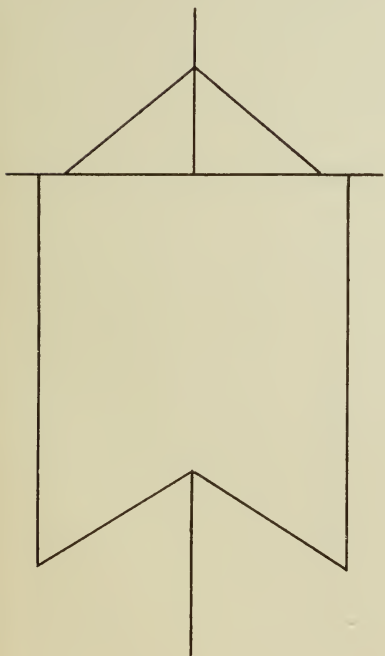
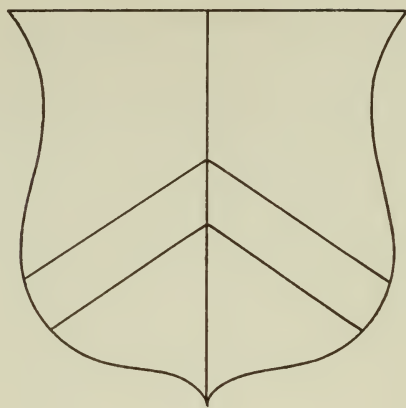
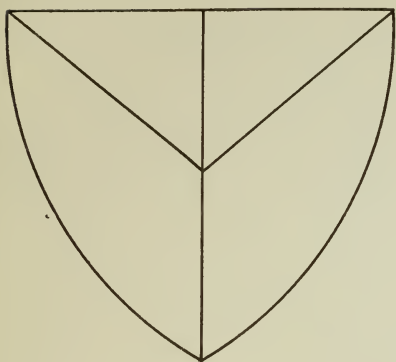


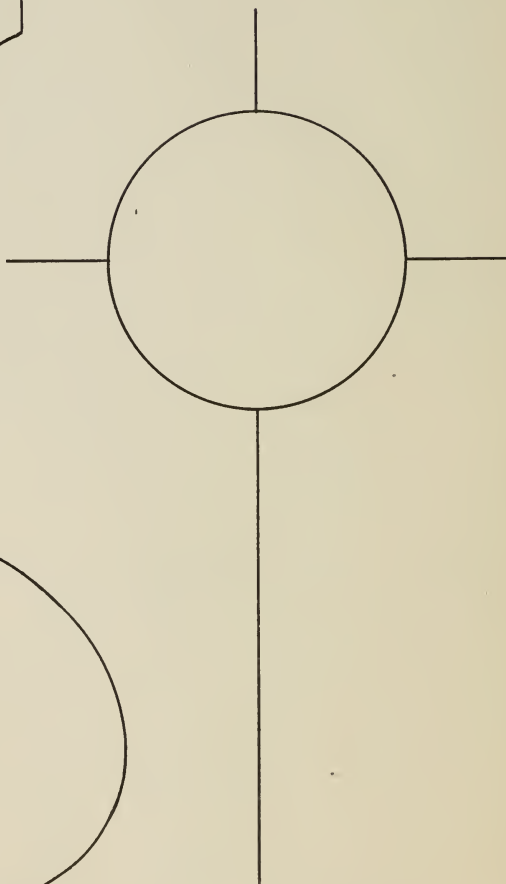
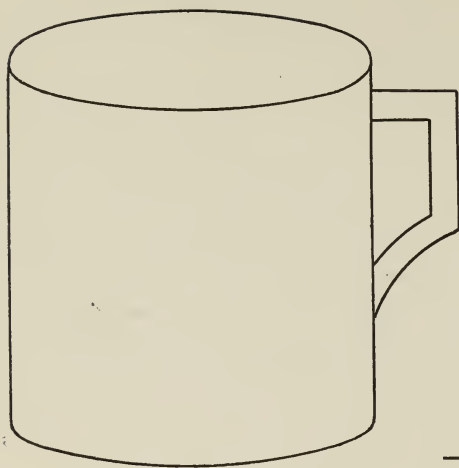


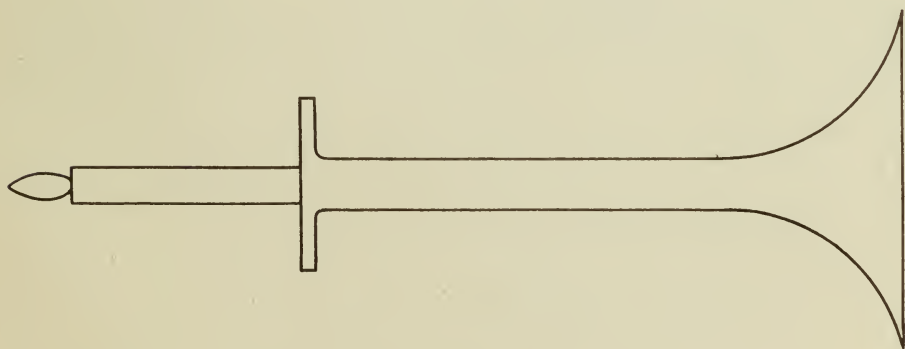
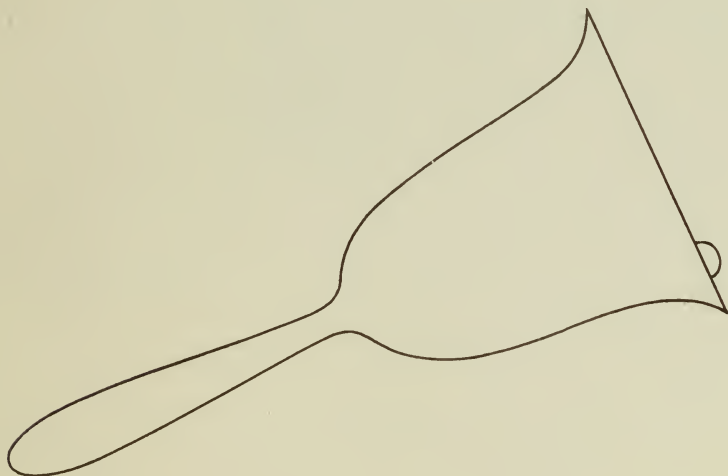
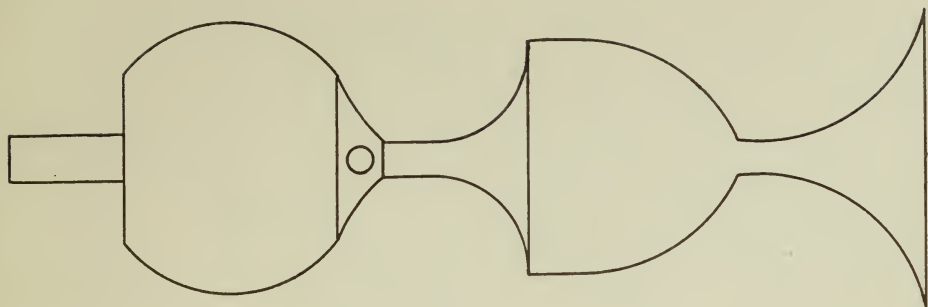


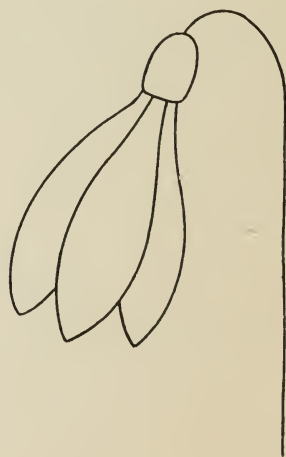
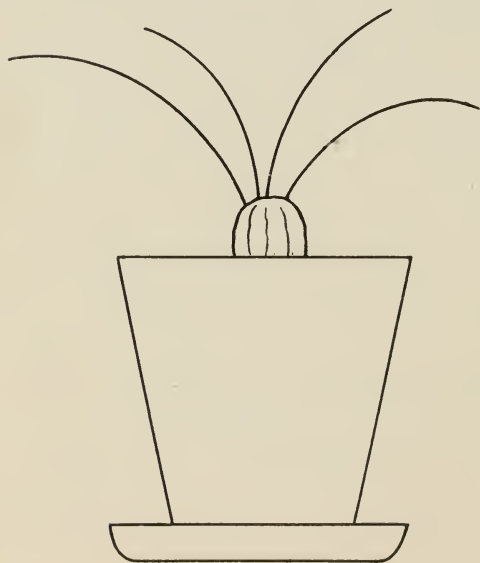
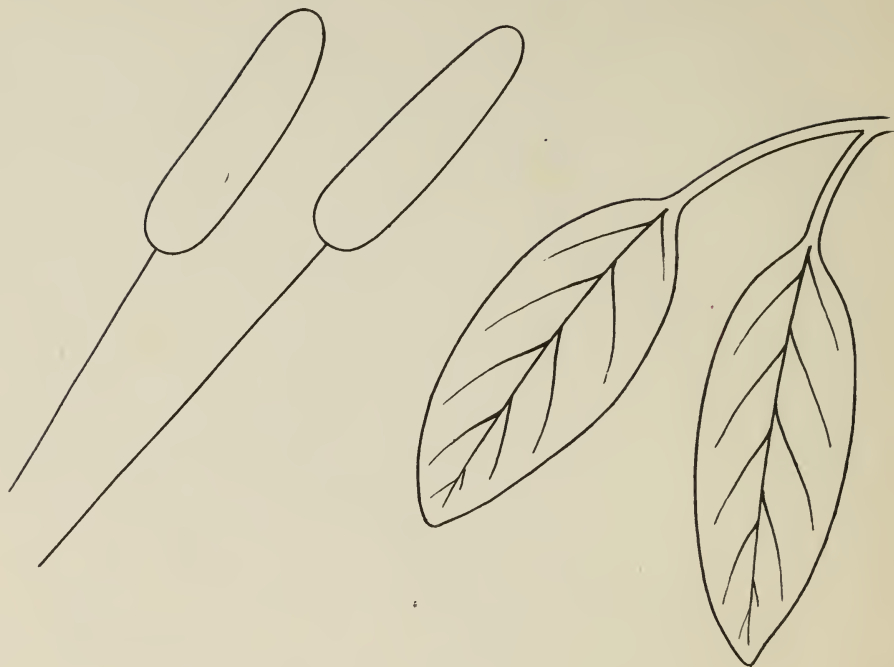


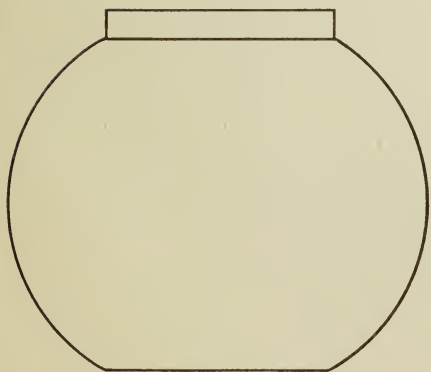
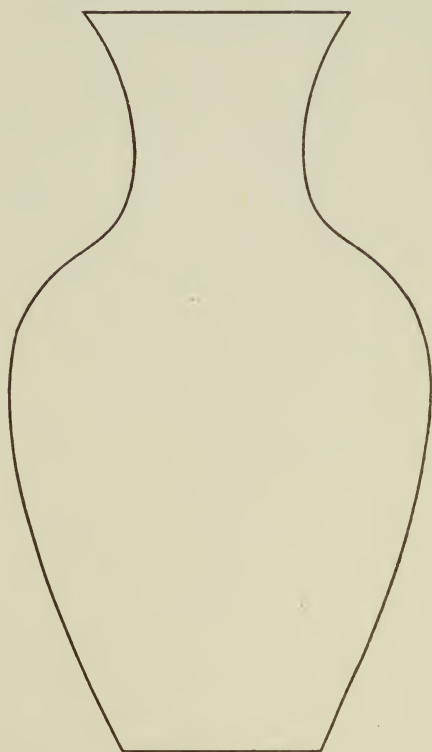










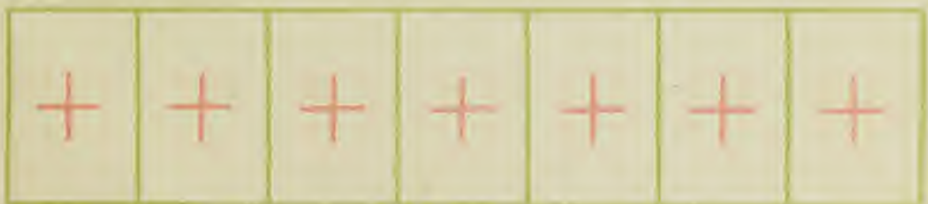
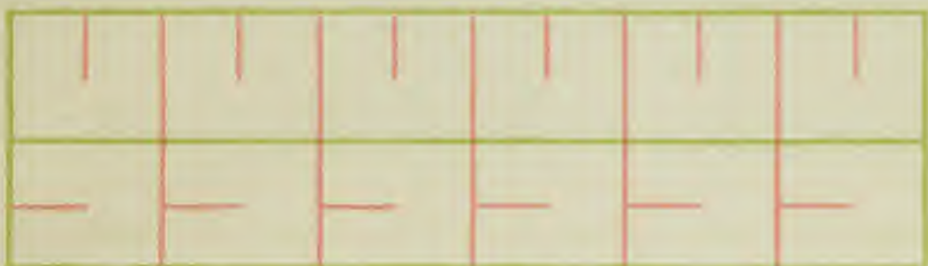
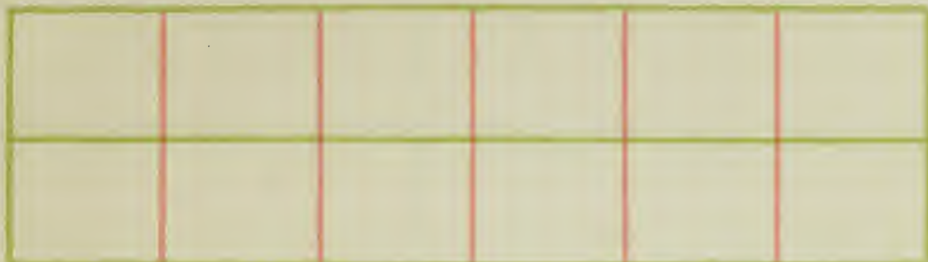


SECTION III
EXERCISES IN DESIGN

The following exercises should be done first on slates. Later, the children who do their work well may be given paper with pencil, brush, or crayon.

After the numbered exercises have been copied, the teacher may require the children, on drawing the squares, to supply the designs themselves. They will need advice and suggestions, with occasional practice in copying any design in keeping with their work in the other sections. It is a good plan for the teacher to fill in a part of the detail, leaving it evidently unfinished, and to ask the children to fill in the rest themselves.

The designs in curves should not be given until the pupils have reached, say, Exercise 40 in Section I.







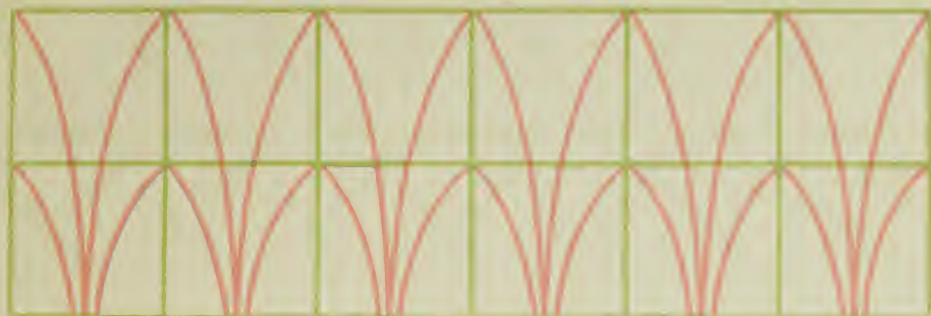








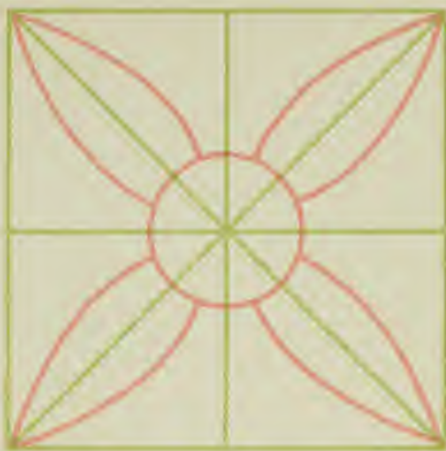




















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